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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/739,516 | 12/18/2000 | Jody Western Lewis | US000345*** | 3122 |

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

TRUONG, LECHI

| ART UNIT | PAPER NUMBER |
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2126

DATE MAILED: 01/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Applicati n N .

09/739,516

Applicant(s)

LEWIS, JODY WESTERN

Examiner

LeChi Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action in response to the amendment filed 10/17/03. Applicant added the new claims 8-11.

Claim Rejections - 35 USC § 103

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swenson et al (US. Patent 4,413, 317) in view of Admitted Prior Art (APA).

As to claim 1, Swenson teaches the transfer of data (the transfer of data, col 1, ln 33-45/ col 2, ln 20-45), storing queue identifiers (the host ID table, col 162, ln 1-10/ the command queue store to access a host identification table, col 2, ln 21-50/ col 188, ln 11-21), a path object (the connection paths, col 2, ln 4-50/ col 1, ln 9-62/ a path, col 161, ln 1-60), processing a data object (the status of the storage control unit with respect to execution of a command, col 1, ln 15-50/ reporting status, col 1, ln 55-68/ the status, col 1-61, ln 50-64/ the command queue for execution, col 161, ln 1-50/ col 188, ln 9-67), a first of said processing object(storage unit, col 1, ln 55-68/ SCU, col 161, ln 1-60/ storage control unit, col 188, ln 9-67), identifying(define the connection paths, col 2, ln 21-50/ check Host ID to see if has a path back, col 1, ln 1-60), a second of said processing objects(a host processor, col 1, ln 55-68/ col 188, ln 9-62/ the specified host, col 161, ln 1-60), an indicator(a status indication, col 188, ln 45-62).

Swenson does not teach placing said data object in a queue. However, APA teaches (another queue, page 4, ln 1-15).

It would have been obvious to apply the teaching of APA to Swenson in order to use the queue to mediate the transfer of a data object among processing objects.

As to claim 2, Swenson teaches determining a result (the status is reported over a connection paths defined by the table, col 2, ln 19-50/ status maybe reported by either of ... to any host processor to which it is connected, col 188, ln 9-62/ it is common practice to report back to a processors the status of the storage control unit with respect to execution of a command issued by the processor, col 1, ln 32-52).

As to claim 3, Swenson teaches result corresponding to said queue (the status is reported over a connection paths defined by the table, col 2, ln 19-50/ status maybe reported by either of ... to any host processor to which it is connected, col 188, ln 9-62/ it is common practice to report back to a processors the status of the storage control unit with respect to execution of a command issued by the processor, col 1, ln 32-52).

Swenson does not teach placing said data object in a queue. However, APA teaches (another queue, page 4, ln 1-15).

It would have been obvious to apply the teaching of APA to Swenson in order to use the queue to mediate the transfer of a data object among processing objects.

As to claim 4, Swenson teaches the transfer of data (the transfer of data, cool 1, in 33-45/ cool 2, in 20-45), storing queue identifiers (the host ID table, col 162, in 1-10/ the command queue store to access a host identification table, cool 2, in 21-50/ col 188, in 11-21), a indicator path (the connection paths, cool 2, in 4-50/ cool 188, in 9-62/ a path, cool 161, in 1-60 (a status indication, cool 188, ln 45-62), processing a data object (the status of the storage control unit with respect to execution of a command, cool 1, in 15-50/ reporting status, cool 1, in 55-68/ the status, cool 1, in 50-64/ the command queue for execution, cool 161, in 1-50/ cool 1, in 9-67), a first of said processing object(storage unit, col 1, ln 55-68/ SCU, col 1, ln 1-60/ storage control

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unit, col 188, ln 9-67), identifying(define the connection paths , col 2, ln 21-50/ check Host ID to see if has a path back, col 1, ln 1-60), a second of said processing objects(a host processor, col 1, ln 55-68/ col 188, ln 9-62/ the specified host, col 161, ln 1-60), a second data object(status modifier status, col 135, ln 5-30/ col 2, ln 19-40).

Swenson does not teach a first queue and a second queue. However, APA teaches (another queue, page 4, ln 1-15).

It would have been obvious to apply the teaching of APA to Swenson in order to use the queue to mediate the transfer of a data object among processing objects.

As to a method of claim 5, see the rejection of claim 3.

As to claim 6, Swenson teaches the data objects are transferred (the transfer of data, col 1, ln 33-45/ col 2, ln 20-45), a path objects (the connection paths, col 2, ln 4-50/ col 188, ln 9-62/ a path, col 161, ln 1-60), an indicator (a status indication, col 188, ln 45-62), second and third processing object (a host processor, col 1, ln 55-68/ col 188, ln 9-62/ the specified host, col 161, ln 1-60), a process (the status of the storage control unit with respect to execution of a command, col 1, ln 15-50/ reporting status, col 1, ln 55-68/ the status, col 161, ln 50-64/ the command queue for execution, col 161, ln 1-50/ col 188, ln 9-67), a result (the status is reported over a connection paths defined by the table, col 2, ln 19-50/ status maybe reported by either of ... to any host processor to which it is connected, col 188, ln 9-62/ it is common practice to report back to a processors the status of the storage control unit with respect to execution of a command issued by the processor, col 1, ln 32-52), a first of said processing object(storage unit, col 1, ln 55-68/ SCU, col 161, ln 1-60/ storage control unit, col 188, ln 9-67), data objects(command, col 2, ln 1-50/ data/ command, col 161, ln 1-60).

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Swenson does not teach placing said data object in a queue. However, APA teaches (another queue, page 4, ln 1-15).

It would have been obvious to apply the teaching of APA to Swenson in order to use the queue to mediate the transfer of a data object among processing objects.

As to claim 7, Swenson teaches the generation of an indicator of a result of a subprocess (generates an external interrupt to report status, col 36, ln 5-8/ generating a host processor identification value specifying the host processor which issued the command, col 186, ln 30-40/ using the host identification generated for the command, and transmit status to the host processor over a connection path defined by table entry, col 2, ln 19-62).

3. Claims **8,11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (APA) in view of Zhou et al (US. Patent 5, 995,511).

As to claim 8, APA teaches an object oriented programming environment (O-O programming, page 3, ln 1-23/ page 4, ln 1-15), data object (data object, page 3, ln 1-23/ page 4, ln 1-15), a first queue (input queue, page 3, ln 1-23/ page 4, ln 1-15), a first processing object (a processing object, page 3, ln 1-23/ page 4, ln 1-15), a second processing object (among processing object, page 4, ln 1-15).

APA does not teach a queue indicator, responsive to the processing, changing the queue indicator to indicate a second queue, the data object determines its own destiny. However, Zhou teaches the connection information entry 52 (c) of the connection table 52 server to define the queue of cells CELL(i) buffer for the connection associated with connection information entry 52 (c)(col 8, ln 48-67col 5, ln 5- 67), three lists including a normal list 201, an early list 202 and a late list 202... lists are defined by respective head and tail pointer 203 through 208, which

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would be provided in a group information table similar to table 52, col 22, ln 59-67 to col 23, ln 1-52), the destination computer 12(mD) determines the proper order to reconstitute the packet 20 from the order in which it receives the cells(col 4, ln 21-36), the cell (i) has a path identifier and virtual path identifier to identify a connection information associated with a queue for transmitting a cell to the destination(col 5, ln 5-67/ col 6, ln 41-67, col 8, ln 1-67), therefore the data object determines its own destination.

It would have been obvious to apply the teaching of Zhou to APA in order to provide information for transfer over the network as destinations with information that is being transferred over selected paths of comprising network.

As to claim 11, APA does not teach a normal or faulty outcome state of the data object. However, Zhou teaches a normal list 201, an early list 202, an early list associated with number of queues 202(0) through 202 (z) depended on the status of the list(col 22, ln 59-67 to col 23, ln 1-52).

It would have been obvious to apply the teaching of Zhou to APA in order to provide an arrangement for use in connection with a digital network in which message transfer paths may be provided with a plurality of transfer service rates , for grouping message transfer paths which have similar transfer service rates to facilitate efficient scheduling of transfers.

4. Claims 9 –10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (APA) in view of Zhou et al (US. Patent 5, 995,511) and further in view of (David Mosberger(Making Paths Explicit in the Scout Operating System).

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As to claim 9, APA does not teach a path X, querying the path X. However, Zhou teaches connection table 52(col 6, ln 45-67), the entries of 52 (c) of connection table which is identified by pointers in the viral path identifier (col 6, ln 45-67).

It would have been obvious to apply the teaching of Zhou to APA in order to provide information for transfer over the network as destinations with information that is being transferred over selected paths of comprising network.

APA does not teach path X as path object oriented. However Mosberger teaches path object (sec: 3.2).

It would have been obvious to apply the teaching of Mosberger to APA in order optimize code along the “past path” or improve resource management.

As to claim 10, APA does not teach a table of queue indicator. However, Zhou teaches connection table 52(col 8, ln 45-67).

It would have been obvious to apply the teaching of Zhou to APA in order to include the status information for each connection, which is associated with a queue.

Response to the argument

5. This is in response to the amended filed date 10/17/2003. Applicant argued to cite “ Object oriented programming enviroment ” “ Object within an O-O system is defined by an interface an implementation”. These limitations were not in the claim limitations. Thus, Swenson and Admitted Prior Art met the claim limitations.

Applicant added the new claims 8-11. Zhou, Mosberge and Admitted Prior Art ‘s references teach object-oriented environment for the data object, the table connection, path object that met the new claims.

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6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

7.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5.

Fax phone: AFTER_FINAL faxes must be signed and sent to: (703) 746-2738, OFFICAL faxes must be signed and send to: (703) 746-7239, NON OFFICIAL faxes should not be signed, please send to: (703) 746-7240

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 9000.

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LeChi Truong
December 16, 2003

A handwritten signature in black ink, appearing to be 'JF' or similar, written in a cursive style.

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100